

REMARKS

This amendment is being filed in response to the Office Action mailed June 17, 2008. In that Office Action, claims 20-32 were rejected on prior art grounds. Claims 33-42 have been added. Accordingly, claims 20-42 are pending in the application.

Claim Rejections

Claims 20-25, 29, 30, and 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Preston. Claims 26-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Preston in view of Gardner, and claim 31 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Preston alone. These rejections are respectfully traversed for the reasons discussed below.

The rejection of each of the claims 20-32 is predicated on the Examiner's interpretation from Preston that the sacrificial bits contained in the IBS packet 70 constitute "periods of silence" as recited in independent claims 20 and 29. Applicants respectfully submit that this interpretation is incorrect and wholly without support in the prior art or in the record. Preston clearly shows that these sacrificial bits are 1's and 0's that are converted to tones using frequencies f1 and f2. And, as is clearly known to those skilled in the art, and as is easily ascertainable by dictionary lookup, a tone is not silence, but a sound, which is the opposite of silence. To interpret the phrase "periods of silence" as reading on tones generated using a sequence of sacrificial (i.e., non-data bearing) bits, is to interpret that phrase as covering completely the opposite of what it clearly and unambiguously means. This is not reasonable.

Furthermore, the fact that the sacrificial bits contain no useful data does not make them "periods of silence." They are still modulated using the frequencies f1 and f2 and thus still produce tones, and this is explicitly disclosed by Preston which then goes on to state that (since they are sacrificial) they can be subsequently scaled or filtered (e.g., attenuated or eliminated) without effecting the digital data being transmitted. The Office Action asserts that Applicants have argued that Preston's sacrificial bit "tones" are not "silent" periods. This is not what Applicants stated, but rather, Applicants argued in their last response that Preston's sacrificial bit

"tones" are not "periods of silence" as recited in the claims. That argument as well as the remaining remarks in Applicants' last response are still deemed fully applicable and have not been properly rebutted. For example, the statement in the most recent Office Action that Preston's "'tones' of the sacrificial bits are nonetheless 'silent' because they communicate no representative data" is not the proper inquiry because (1) the claim specifies "periods of silence", which tones are not and (2) the Examiner's statement focuses on the content carried by the signal (i.e., the meaning or meaninglessness of the data being carried by the tones), rather than on whether the signal includes "periods of silence."

To sum up, Applicants submit that, as shown in Fig. 5 of Preston, the sacrificial bits are 1's and 0's that are modulated using the two different frequencies shown in Fig. 6, and therefore do not constitute "periods of silence" within a data signal. Nor does Preston anywhere suggest generating such a signal. Accordingly, Applicants respectfully request withdrawal of the rejections on the basis of Preston. With respect to the rejection of claims 26-28, as stated in Applicants' last response, Gardner has been cited only for its applicability to the additional limitations added in these dependent claims. However, Gardner does not make up for the above-noted deficiencies of Preston. That is, there is nothing from Gardner that teaches or suggests generating a modulated periodic data signal having periods of silence. Accordingly, claims 26-28 also patentably define over these references.

Clarification

In the second full paragraph of page 5 of Applicants' response filed November 1, 2007, it was stated in connection with the Yoon reference that: "As an example, when normal speech is being sent over the voice channel during a cellular telephone call, the transmission from the mobile station to the base station does not stop during each period of silence (e.g., between words or sentences)." This statement uses the phrase "period of silence" to refer to breaks in the inputted speech being modulated. Because this was not meant to refer to the same "periods of silence" used in the claims, Applicants rescind the use of this phrase in this statement so as to avoid any possible confusion in meaning of that statement. Instead, that quoted statement should be understood as stating at the end that "the transmission from the mobile station to the base station does not stop during each break in speech (e.g., between words or sentences)."

New Claims 33-42

New claim 33 is dependent on claim 29 and should be allowed therewith.

Independent claim 34 recites a method of communicating data over a voice channel of a wireless communication system, which includes the step of generating a data signal that includes modulated data and periods of silence during which the data signal is unmodulated. As discussed above and in Applicants' last response, Preston's sacrificial bits are modulated into the two frequency tones like any of the other bits in the IBS packet 70 and thus, are not "periods of silence during which the data signal is unmodulated," as recited in this claim. Accordingly, Applicants respectfully submit that claim 34 and claims 35-42 that each ultimately depend therefrom, all patentably define over Preston.

Conclusion

In view of the foregoing, Applicants respectfully submit that all claims are allowable over the prior art. Reconsideration is therefore requested. The Examiner is invited to telephone the undersigned if doing so would advance prosecution of this case.

The Commissioner is hereby authorized to charge Deposit Account No. 07-0960 for any required fees, or credit any overpayment associated with this communication.

Respectfully submitted,

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